

WHAT IS CLAIMED IS:

1. A recording rate automatic setting recording device, comprising:

recording means for recording a video signal on an information recording medium;

reserved recording time detecting means for, on the basis of recording reservation information, detecting a reserved recording time needed for reserved recording;

remaining capacity calculating means for detecting a remaining capacity of a first recording surface and a remaining capacity of a second recording surface of the information recording medium, and for calculating a capacity, in which the remaining capacities of both surfaces are added together, as an entire remaining capacity;

recording bit rate setting means for setting a recording bit rate, on the basis of the entire remaining capacity calculated by the remaining capacity calculating means and the reserved recording time detected by the recording time detecting means; and

recording control means for, in accordance with the recording bit rate set by the recording bit rate setting means and the recording reservation information, recording a target video signal onto the first and second recording surfaces of the information recording medium.

2. A recording rate automatic setting recording device, comprising:

recording means for recording a video signal on a predetermined recording surface of an information recording medium;

reserved recording time detecting means for, on the basis of recording reservation information, detecting a reserved recording time needed for reserved recording;

remaining capacity calculating means for detecting an entire capacity and a remaining capacity of a first recording surface of the information recording medium which can be accessed by the recording means, and for, assuming a capacity which is at least half of the entire capacity of the first recording surface to be a remaining capacity of a second recording surface of the information recording medium, calculating a capacity, in which the remaining capacity of the first recording surface and the remaining capacity of the second recording surface are added together, as an entire remaining capacity;

first recording bit rate setting means for setting a recording bit rate, on the basis of the entire remaining capacity calculated by the remaining capacity calculating means and the reserved recording time detected by the recording time detecting means; and

first recording control means for, in accordance

with the recording bit rate set by the first recording
bit rate setting means and the recording reservation
information, recording a target video signal onto the
first and second surfaces of the information recording
medium.

3. A recording rate automatic setting recording
device according to claim 2, wherein the remaining
capacity calculating means calculates the entire
remaining capacity after confirming that the
information recording medium is a plural-surfaces
recordable medium.

4. A recording rate automatic setting recording
device according to claim 2, wherein the remaining
capacity calculating means assumes the entire capacity
of the first recording surface to be the remaining
capacity of the second recording surface, and
calculates the entire remaining capacity.

5. A recording rate automatic setting recording
device according to claim 2, further comprising:

backup recording means for, during a period of
time from a state in which the first recording surface
can be accessed until a state in which the second
recording surface can be accessed, and in accordance
with the recording bit rate set by the first recording
bit rate setting means, temporarily recording a video
signal in a recording section built-in in a device
different from the information recording medium.

6. A recording rate automatic setting recording device according to claim 2, further comprising:

second recording bit rate setting means for, when a state in which the second recording surface can be accessed is reached, detecting the actual remaining capacity of the second recording surface, and on the basis of the actual remaining capacity of the second recording surface and a remaining recording time of target video data to be recorded onto the second recording surface, setting again a recording bit rate; and

second recording control means for, on the basis of the recording bit rate set again by the second recording bit rate setting means and the recording reservation information, recording the target video signal onto the second recording surface of the information recording medium.

7. A recording rate automatic setting recording device according to claim 5, further comprising:

second recording bit rate setting means for, when a state in which the second recording surface can be accessed is reached, detecting the actual remaining capacity of the second recording surface, and setting the recording bit rate again on the basis of a balance remaining capacity, in which a capacity of the video signal temporarily stored in the recording section is subtracted from the actual remaining capacity of the

second recording surface, and the remaining recording time of target video data to be recorded onto the second recording surface; and

5 second recording control means for, on the basis of the recording bit rate set again by the second recording bit rate setting means and the recording reservation information, recording the target video signal onto the second recording surface of the information recording medium.

10 8. A recording rate automatic setting recording method, comprising:

detecting a reservation recording time needed for reserved recording on the basis of recording reservation information;

15 detecting an entire capacity and a remaining capacity of a first recording surface of an information recording medium;

assuming a capacity which is at least half of the entire capacity of the first recording surface to be a remaining capacity of a second recording surface of the information recording medium;

20 calculating a capacity, in which the remaining capacity of the first recording surface and the remaining capacity of the second recording surface are added together, as the entire remaining capacity;

25 setting a recording bit rate, on the basis of the entire remaining capacity and the reservation recording

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time; and

recording a target video signal onto the first and
second recording surfaces of the information recording
medium in accordance with the recording bit rate and
the recording reservation information.

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